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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,553	01/04/2002	Mark Linus Bauman	ROC920010193US4	7117

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IBM CORPORATION, INTELLECTUAL PROPERTY LAW
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EXAMINER
TRUONG, LECHI

ART UNIT	PAPER NUMBER
2194	

DATE MAILED: 11/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/037,553	BAUMAN ET AL.
	Examiner	Art Unit	
	LeChi Truong	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 September 2005</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-10,12-19 and 21-26* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 3-10, 12-19, 21-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

DETAILED ACTION

1.   Claims 1, 3-10, 12-19, 21-26 are presented for the examination. Claims 2, 11 and 20 are

canceled.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

2.   Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan(US.

Patent 6,222856 B1) in view of Firth et al (US. 5,987,517).

3.   **As to claim 1,** Krishnan teaches the invention substantially as claimed including:

providing asynchronous network communication between a client and a server (col 8, ln 20-25/

ln 1-3), socket (socket, col 8, ln 10-15/ ATQ, col 8, ln 52-56), server (server, col 8, ln 10-15),

configuring a socket for an application on the server (col 8, ln 10-15), request (request, col 8, ln

6-15), the client (client, col 8, ln 6-15), a continuous mode input operation (assigns an

asynchronous thread context from the ATG library 80 to handle the request, col 8, ln 6-8/ the

ATO library also supports the I/O operating with respect to the network by providing functions

to reads, writer and transmit files , col 8, ln 10-13/ All the subsequent asynchronous I/O

operations, col 8, ln 20-21/ the ATQ library 80 enables asynchronous input and output

operations, col 6, ln 33-37), a listening socket(socket are stored in the ATQ Context, col 8, ln

13-15/ the ATO uses the context value, col 8, ln 53-55).

4.   Krishnan does not explicit teach the single asynchronous operation. However, Firth

teaches single asynchronous operation (select asynchronous behavior for function calls, and

select internal caching. The single call to InternetOpen () initializes and Internet session for the

application, col 16, ln 26-32/ asynchronous function operation, col 15, ln 42-46/ an application

can communication information about several request using a single function call, col 18, ln 15-

20).

5.   It would have been obvious to one of the ordinary skill in the art at the time the invention

was made to combine the teaching of Krishnan and Firth because Firth's the single asynchronous

operation would improve flexibility of Krishnan's system by adding new or additional Internet

application protocols for establishing communications with a variety of computer networks.

6.   Claims **4-8, 10, 13-17, 19, 21, 23-26** are rejected under 35 U.S.C. 103(a) as being

unpatentable over Krishnan in view of Firth et al (US. 5,987,517), as applied to claim 1 above,

and further in view of APA (Admitted Prior Art).

7.   **As to claim 4,** Krishnan and Firth do not teach the continuous mode input operations are

issued from a main thread of the application. However, APA teaches the continuous mode input

operations are issued from a main thread of the application (page 14, ln 17-20).

5.   It would have been obvious to one of the ordinary skill in the art at the time the invention

was made to combine the teaching of Krishnan, Firth and APA because the continuous mode

input operations are issued from a main thread of the application would improve flexibility of

Krishnan and Firth's systems by allowing a socket to communication between a first process and

second process at the remote machine.

8.   **As to claim 5,** APA teaches placing a single pending receive data structure on a pending

queue (page 5, ln 4-6), copying contents of the pending receive data structure to a completed

receive data structure queued on a receive completion queue (page 5, ln 5-8).

9.   **As to claim 6,** APA teaches placing a single pending accept data structure on a pending

queue; for each of the plurality of incoming client connections (page 4, ln 20-21), copying

contents of the single pending accept data structure to a completed accept data structure queued

on a accept completion queue (page 4, ln 22-24).

10.   **As to claim 7,** it is an apparatus claim of claim 5; therefore, it is rejected for the same

reason as claim 5 above.

11.   **As to claim 8,** APA teaches acquiring a buffer from system supply memory to contain

the completed client request (page 5, ln 13-14).

12.   **As to claim 10,** it is an apparatus claim of claim 1; therefore, it is rejected for the same

reason as claim 1 above. In additional, Krishnan teaches application-programming interface (the

QAT will call when a request arrives, col 8, ln 16-20).

13.   **As to claims 13-17,** they are apparatus claims of claims 4-8; therefore, they are rejected

for the same reasons as claims 4-8 above.

14.   **As to claim 19,** it is an apparatus claim of claim 10; therefore, it is rejected for the same

reason as claim 10 above. In additional, Firth teaches a network connection with a remote

computer (col 3, ln 35-34), a processor (col 5, ln 1-7), memory (col 5, ln 1-7).

15.   **As to claims 21, 23-26,** they are apparatus claims of claims 4-8; therefore, they are

rejected for the same reasons as claims 4-8 above.

16.   Claims **3, 12** are rejected under 35 U.S.C. 103(a) as being unpatentable Krishnan(US.

Patent 6,222856 B1) in view of Firth et al (US. 5,987,517), as applied to claim 1 above, and

further in view of Shah et al (US. Patent 6,175,879 B1).

17.   **As to claim 3,** Krishnan and Firth do not explicitly teach receive the client requests

without invoking the application unit the request is completely received. However, Shah teaches

receive the client requests without invoking the application unit the request is completely

received (col 6, ln 45-53/ col 4, ln 40-45).

18.   It would have been obvious to one of the ordinary skill in the art at the time the invention

was made to combine the teaching of Krishnan, Firth and Shah because Shah's single operation

would improving reliability of Krishnan and Firth 's systems by preventing the system from

down grading its performance that associated with receive-any data handling.

19.   **As to claim 12,** it is an apparatus claim of claim 3; therefore, it is rejected for the same

reason as claim 3 above.

20.   Claims **9, 18, 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Krishnan(US. Patent 6,222856 B1) in view of Firth et al (US. 5,987,517), as applied to claim 1

above, in view of APA (Admitted Prior Art) and further in view of Joh (US. Patent 6,717,954

B1).

21.   As to claim 9, Krishnan, Firth and APA do not teach the buffer comprises sizing the

buffer according to a size of the completed client request. However, Joh teaches the buffer

comprises sizing the buffer according to a size of the completed client request (buffer is the same

size of the current message, col 8, ln 1-2).

22.   It would have been obvious to one of the ordinary skill in the art at the time the invention

was made to combine the teaching of Krishnan, Firth, APA and Joh because Joh's sizing the

buffer according to a size of the completed client request would increase the efficiency of

Krishnan, Firth and APA's systems by providing a custom fit for message transmission based on

client request.

23.   As to claims 18, 22, they are apparatus claims of claim 9; therefore, they are rejected for

the same reason as claim 9 above.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to LeChi Truong whose telephone number is (571) 272 3767. The

examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Thomson, William can be reached on (571) 272 3718. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR of Public PAIP. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIP

system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

November 21, 2006

MENG-AL T. AN
SUPERVISORY PATENT EXAMIN